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[54] OMEGA-3 FATTY ACIDS IN TRAUMATIC INJURY TREATMENT

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Children

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Related U.S. Application Data

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[52]	U.S. Cl 514/2; 514/21;
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[56] References Cited

U.S. PATENT DOCUMENTS

4,401,657	8/1983	Kashiwabara et al	514/21
4.678.808	7/1987	Ward et al.	514/560

FOREIGN PATENT DOCUMENTS

1197782 12/1985 Canada 514/560

OTHER PUBLICATIONS

Mochizuki et al., JPEN, vol. 8, No. 6, (1984), pp. 638-646.

Gottschlich et al.: Fat Kinetics and Recommended Dietary Intake in Burns, Journal of Parenteral and Enteral Nutrition 11, 1:80-85, 1987.

Alexander, J. W.: Nutrition and Infection, Arch. Surg. 121:966-972, 1986.

Alexander, J. W. et al.: The Importance of Lipid Type

in the Diet After Burn Injury, Annals of Surgery 204, 1:1-8, 1986.

Dominioni, L. et al.: Enteral Feeding in Burn Hypermetabolism; Nutritional and Metabolic Effects of Different Levels of Calorie and Protein Intake, Journal of Parenteral and Enteral Nutrition 9, 3:269-279, 1985.

Alexander, J. W.: Burn Care: Specialty in Evolution—1985 Presidential Address, American Burn Association, The Journal of Trauma 26, 1:1-6, 1986.

Trocki, O. et al.: Comparison of Continuous and Intermittent Tube Feedings in Burned Animals, JBCR 7, 2:130-137, 1986.

Trocki, O. et al.: Intact Protein Versus Free Amino Acids in the Nutritional Support of Thermally Injured Animals, Journal of Parenteral and Enteral Nutrition 10, 2:139-145, 1986.

Saito, H. et al.: The Effect of Route of Nutrient Administration on the Nutritional State, Catabolic Hormone Secretion and Gut Mucosal Integrity Following Burn Injury, submitted to JPEN, Jan. 1986.

(List continued on next page.)

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[57] ABSTRACT

A composition and method of treating a traumatic injury by improving immunologic response and reducing a hypermetabolic response associated with those suffering from a traumatic injury such as a substantial burn, trauma, major surgery and the like and more particularly to those suffering from a substantial thermal burn injury to the skin or other areas through the administration of the composition of the invention to those suffering from the traumatic injury are disclosed. The composition comprises an intact protein, arginine, carbohydrate, lipid comprising the omega-3 fatty acids of fish oil, including eicosapentaenoic acid, and with linoleic acid limited to the amount necessary to prevent an essential fatty acid deficiency thereof and nutritionally necessary vitamins and minerals.

10 Claims, 2 Drawing Sheets